

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 North Grand Avenue East
Post Office Box 19506
Springfield, Illinois 62794-9506

Project Summary for an Application from
Vista Health - Victory Memorial Hospital for Renewal of the
Federally Enforceable State Operating Permit (FESOP) for
1324 North Sheridan Road
Waukegan, Illinois 60085

Site Identification No.: 097190ADC
Application No.: 91020067

Illinois EPA Contacts

Permit Analyst: David Hulskotter
Community Relations Coordinator: Brad Frost

I. INTRODUCTION

Vista Health - Victory Memorial Hospital has applied for renewal of its Federally Enforceable State Operating Permit (FESOP) for its hospital at 1324 North Sheridan Road in Waukegan. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the renewed permit that it would purpose to issue for the plant. However, before renewing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

ii. SOURCE DESCRIPTION

Victory Memorial hospital operates three boilers, three ethylene oxide sterilizers, and an emergency engine generator. The boilers are used for space heating, humidification, water heating, and sterilization loading. Two boilers are fueled by either natural gas or #2 fuel oil and one boiler is fueled by only natural gas.

The 800 kW emergency engine generator uses #2 fuel oil and is used for emergency power. The three ethylene oxide sterilizers are used to sterilize hospital equipment.

The principal air contaminant emitted from the facility is nitrogen oxides which is generated from the fuel combustion process. Nitrogen oxides are formed thermally by a combination of oxygen and nitrogen in the air at a temperature at which fuel is burned.

In addition, sulfur dioxides (SO₂), carbon monoxide (CO), particulate matter (PM) and volatile organic material (VOM) are emissions formed by combustion processes. CO is formed by the incomplete combustion of fuel. SO₂ emissions are mostly generated during the combustion of fuel oil.

The ethylene oxide sterilizers emit ethylene oxide and CFC-12 into the atmosphere. Ethylene oxide is a hazardous air pollutant and is also a volatile organic material. CFC-12 is a non volatile organic material.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under a federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has been operating this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emission of the plant to below the major-source-thresholds of 100 tons for nitrogen oxides, 10 tons for an individual HAP and 25 tons for combined HAPs.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

V. CONTENTS OF THE PERMIT

The renewed permit that the Illinois EPA is proposing to issue would continue to identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for nitrogen oxides, 10 tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

This permit sets limitations on the ethylene oxide usage and CFC-12 usage. This permit would also set limitations on the amount of natural gas and #2 fuel oil combusted. The permit requires the Permittee keep records of the ethylene oxide usage, CFC-12 usage, natural gas combusted and #2 fuel oil combusted. With the records the Permittee maintains the Illinois EPA can verify compliance with permit conditions and calculate the plant's air emissions. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for renewal of its permit. The Illinois EPA is therefore proposing to renew the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions of the draft permit. If substantial public interest is shown in this matter, the Illinois

EPA will consider holding a public hearing in accordance with 35
IAC Part 166.

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